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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/661,724	09/12/2003	Joel Tenney	43557.264016	8280

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EXAMINER	
PAK, JOHN D	

ART UNIT	PAPER NUMBER
1616	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/661,724	TENNEY ET AL.	
	Examiner	Art Unit	
	JOHN PAK	1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 December 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-47* is/are pending in the application.

4a) Of the above claim(s) *1-11 and 22-47* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *12-21* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *9/03,3/04,3/05*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Claims 1-47 are pending in this application.

Applicant is advised that this application has been transferred to the undersigned Primary Examiner because the previous Examiner is no longer employed by the USPTO.

Applicant's election with traverse of the invention of Group II, claims 12-21, wherein the single disclosed species of the volatile acid precursor is **ferric chloride** and the single disclosed species of the carbon dioxide precursor is **sodium bicarbonate**. Applicant is advised that election of species requirement as to other components is hereby withdrawn.

Applicant's traversal is based on the argument that the burden on applicant outweighs by the examiner's burden. The Examiner maintains that this is not the correct standard by which undue burden in the context of a restriction requirement is established. As far as the Examiner is aware, and applicant cites no authority to show otherwise, the undue burden requirement in establishing a proper restriction requirement does not require balancing of burden on applicant. The Examiner maintains the undisputed position of record that there would be undue burden placed on the Examiner if the restriction were not required as set forth in the Office action of 10/13/2006; and that undue burden, taken with the distinctness of the inventions as set forth in the record of this application, renders the outstanding restriction requirement proper.

For these reasons, the outstanding restriction requirement is maintained. Accordingly, claims 1-11 and 22-47 are withdrawn from further consideration as being directed to non-elected subject matter. Claims 12-21 will presently be examined.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 12, 13, 14, 16, 19 are rejected under 35 U.S.C. 102(b) as being anticipated by JAPIO abstract 1984-098008.

JAPIO abstract 1984-098008 discloses attracting and catching mosquitoes by processing a powder mixture consisting of a carbonate or bicarbonate and a deliquescent acidic salt such as calcium chloride dihydrate with water in air into a wet state. Generation of carbonic acid gas (i.e. CO_2) is disclosed. Use of a catching box with an adhesive inner side to attract, trap and kill the mosquitoes is disclosed.

Even though the cited reference does not expressly disclose production of hydrogen chloride (instant claim 14), it is the Examiner's position that because the same exact carbon dioxide precursor + same exact volatile acid precursor (see applicant's 10/243,590, specification page 2, lines 10-28, wherein calcium chloride is included) are combined with water, the same volatilized acid, carbon dioxide and water vapor would be produced. MPEP 2112, 2112.02.

For these reasons, the claims are anticipated.

Claims 12, 13, 16, 20-21 are rejected under 35 U.S.C. 102(b) as being anticipated by ZA 8505940 (abstract, cited by applicant as reference 30 in the IDS of 3/15/2004).

ZA 8505940 discloses a pest attractant (ticks, mosquitoes, tsetse flies) comprising a dry mixture of an inorganic carbonate or bicarbonate and an acid, which is capable of reacting the base in the presence of water to form carbon dioxide. Incorporation of a pesticidally active compound is taught.

Even though the cited reference does not expressly disclose "a volatile acid precursor," the Examiner is interpreting the acid ingredient that reacts with the carbonate or bicarbonate as being within this feature. The acid would react, the carbon dioxide would be generated, and some of the acid would be volatilized thereby. The reacting acid is therefore the precursor and the acid that volatilizes along with carbon dioxide generation is the volatilized acid. The water vapor would necessarily be present from the effervescent action of acid + carbonate/bicarbonate reaction.

For these reasons, the claims are anticipated.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 12-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 59-098008 (as evidenced by the English abstracts JAPIO abstract 1984-098008 and HCAPLUS abstract 1984:546140) in view of ZA 8505940, Okada et al. (US 6,566,392) and The Merck Index.

Teachings of JP 59-098008 are evidenced by the following two English language abstracts. JAPIO abstract 1984-098008 discloses attracting and catching mosquitoes by processing a powder mixture consisting of a carbonate or bicarbonate and a deliquescent acidic salt such as calcium chloride dihydrate with water in air into a wet state. Generation of carbonic acid gas (i.e. CO_2) is disclosed. Use of a catching box with an adhesive inner side to attract, trap and kill the mosquitoes is disclosed. HCAPLUS abstract 1984:546140 adds to the understanding of the original document JP 59-098008 by disclosing that acidic salts are hygroscopic acidic salts that react with carbonates to generate CO_2. Zinc chloride is exemplified and mosquitoes are attracted when reacted with carbonate and water.

ZA 8505940 discloses a pest attractant (ticks, mosquitoes, tsetse flies) comprising a dry mixture of an inorganic carbonate or bicarbonate and an acid, which is capable of reacting the base in the presence of water to form carbon dioxide. Incorporation of a pesticidally active compound is taught.

Okada et al. disclose the technology of incorporating insecticides and a carbonate + acid CO_2 generating system in various solid forms such as granules or tablets (column 1, lines 33-44; column 2, lines 4-37).

The Merck Index is cited to establish that ferric chloride hexahydrate is a known hygroscopic acidic salt substance (page 683).

JP 59-098008 does not expressly disclose that an acid is volatilized. However, one having ordinary skill in the art would have expected from the use of acid + carbonate/bicarbonate to generate CO_2 that the effervescent action would volatilize the other reacting substances, water and acid.

JP 59-098008 does not expressly disclose that hydrogen chloride is produced, but such result would have been expected by an ordinary skilled artisan in this field, with at least a college chemistry degree proficiency in acid-base chemistry when the basic carbonate/bicarbonate is reacted with an acidic, chloride-containing substance such as calcium chloride or zinc chloride to generate CO_2.

JP 59-098008 does not expressly disclose that the hygroscopic acidic salt is ferric chloride hydrate, even though calcium chloride dihydrate and zinc chloride are specified. The ordinary skilled artisan would have been able to select another hygroscopic acidic salt such as ferric chloride hydrate because ferric chloride hexahydrate is a known acidic substance that is "very hygroscopic" and strongly acidic (The Merck Index).

JP 59-098008 does not expressly disclose that the volatile acid precursor is impregnated in a carrier (instant claim 17), but said precursors, i.e. acidic salts such as calcium chloride dihydrate and ferric chloride hydrate, are hygroscopic, as required by JP 59-098008. Hygroscopic substances present storage problems because they cake

and clump, making it difficult to use. Therefore, the ordinary skilled artisan would have been motivated to utilize them in a form that reduces such problems by impregnating in a carrier. Further motivation arises from the prior art technology (Okada et al.) of incorporating insecticides and a carbonate + acid CO_2 generating system in various solid forms such as granules or tablets, which are fairly suggestive of impregnation in a carrier.

JP 59-098008 does not expressly disclose a gas permeable sachet for containing the volatile acid precursor and the carbon dioxide precursor, but such feature is fairly suggested by convenience of application and uniform dosing. A prepackaged product, which would require minimal contact and certainty in dosing by the end user, which allows the CO_2 gas to permeate, would have been obvious packaging choice since gas permeability is required to allow the attractant to work.

JP 59-098008 does not expressly disclose the step of killing at least a portion of the attracted arthropods by using/combining a pesticide with a volatile acid precursor and a carbon dioxide precursor. However, the secondary references by ZA 8505940 and Okada et al. amply suggest that the attracted insects can be killed by using a combined pesticide.

Therefore, the claimed invention, as a whole, would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made, because every element of the invention and the claimed invention as a whole have been fairly disclosed or suggested by the teachings of the cited references.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to JOHN PAK whose telephone number is **(571)272-0620.** The Examiner can normally be reached on Monday to Friday from 8 AM to 4:30 PM.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's SPE, Johann Richter, can be reached on **(571)272-0646**.

The fax phone number for the organization where this application or proceeding is assigned is **(571)273-8300**.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571)272-1600.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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